UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

ACTION MEMORANDUM

DATE: SEP 26 1997

SUBJECT: Request for a 12-Month and $2 Million Exemptions, Ceiling Increase and Removal Action Restart at the Bossert Manufacturing Site in Utica, Oneida County, New York

FROM: Jack D. Harmon, On-Scene Coordinator
Removal Action Branch

TO: Jeanne M. Fox
Regional Administrator

THRU: Richard L. Caspe, Director
Emergency and Remedial Response Division

Site ID: S7

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of the 12-month and $2 million exemptions, a ceiling increase and a removal action restart described herein for the Bossert Manufacturing Site (Site) located on 1002 Oswego Street, Utica, Oneida County, New York, 13501. Previous removal action activities included the following: decontamination of the Site building's interior; consolidation of approximately 3,500 cubic yards of polychlorinated biphenyl (PCB) contaminated debris; and off-site disposal of hazardous wastes. The total project

ceiling for conducting the previous response activities was $1,991,259, of which $1,775,609 was used for mitigation contracting. The actions proposed in this memorandum include the following: off-site disposal of approximately 3,500 cubic yards of PCB-contaminated debris; asbestos abatement; decontamination of mechanical and hydraulic presses; partial demolition/shoring of the building; repairing and maintaining the perimeter fence; and providing Site security. The proposed action will require an additional funding of $3,998,741, of which $3,574,391 is from the regional removal allowance. The requested funds will result in a total project ceiling of $5,990,000 and a mitigation contracting ceiling of $5,350,000.

The Site is not on the National Priorities List (NPL). There are no nationally significant or precedent-setting issues associated with the proposed removal action.

II. SITE CONDITIONS AND BACKGROUND

The Comprehensive Environmental Response, Compensation, and Liability Information System ID number for this time-critical removal action is NYD002249563.

A. Site Description

1. Removal site evaluation

On May 15, 1986, the EPA received a request for a response action at the Site pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. §§ 9601-9675 from the New York State Department of Environmental Conservation (NYSDEC). The EPA conducted a removal response action at the Site which included the following activities: decontamination of the building's interior; consolidation of approximately 3,500 cubic yards of PCB contaminated debris inside a prepared and secured "vault" area; and off-site disposal of hazardous wastes. The EPA's removal response actions were completed on September 25, 1987. Further remediation of the Site was to be conducted by NYSDEC. NYSDEC entered into an Administrative Order on Consent with the City of Utica (Utica) for remediation activities to be conducted at the Site, however, these activities were never undertaken due to Utica's ensuing financial hardship.

NYSDEC referred the Site again to EPA on March 17, 1997. On April 14, 1997, the Chief of the Removal Section, along with representatives from NYSDEC, visited the Site and an expedited removal assessment was performed. There is evidence of entry onto the Site by the public and vandalism was prevalent, i.e., holes in the fencing, graffiti, doors ripped off their hinges, hundreds of windows broken, etc. The vault area that was once secure has been broken into and obvious vandalism has taken place. Several areas of roofing have collapsed and friable asbestos which is light weight and easily airborne was observed hanging from pipes as well as in piles on the floor. The large volumes of PCB-contaminated debris and asbestos, as well as the continuing deterioration of the building, present a potential threat to human health and the environment.

2. Physical location

The Site is located at 1002 Oswego Street, Oneida County, New York in a densely populated area in the City of Utica. The Site's eastern boundary is a major highway carrying a daily average of 75,000 vehicles. The Site is bounded in other directions by residential and commercial areas. The Washington and Kernan Schools, which have a combined enrollment of approximately 2,000 students, are less than five blocks from the Site (see Appendix A).

3. Site characteristics

The former production facility of the Bossert Manufacturing Corporation consists of a 175,000 square foot building situated on approximately six acres of land. From 1896 to the 1980's, the Site was used for the stamping, weldment and fabrication of sheet metal articles such as brake backing plates and steel floor grates. As a result of past manufacturing practices and salvage operations at the Site subsequent to plant closure in 1985, interior surfaces on floors and walls of the facility, as well as machinery and other appurtenances contained within the building, were contaminated with PCBs. Bossert Manufacturing Corporation filed for bankruptcy (Chapter 11) on May 20, 1983 and on May 17, 1986, amended their filing status to Chapter 7. On October 29, 1986, NYSDEC informed the U.S. Environmental Protection Agency (EPA) of an incident involving two teenagers that were exposed to chemicals while playing on-site. On November 17, 1986, after approval of a Request for Rapid Authorization of CERCLA removal action monies, EPA initiated a removal action that included 24-hour security and installation of night-time lighting. Upon completion of preliminary assessment activities, EPA began cleanup activities on May 5, 1987. EPA's previous response activities resulted in the cleaning of the building's interior surfaces and consolidating PCB-contaminated debris into two rooms inside the building.

The proposed removal action will be the second EPA removal action at the Site.

4. Release or threatened release into the environment of a hazardous substance, pollutant, or contaminant.

Analytical results of samples collected during EPA's previous removal activities and the Phase I site investigation (SI) identified CERCLA hazardous substances present at the Site as listed in 40 CFR 302.4. Currently, an estimated 3,500 cubic yards (or approximately 5,000 tons) of PCB contaminated debris and approximately 5,000 linear feet of asbestos pipe wrap are present within the building. PCBs within the debris are present at concentrations as high as 62,000 parts per million (ppm). In addition, 28 large metal presses with PCB surface contamination up to 1,800 $\mu g/100cm^2$ are present inside the building. Two drums of amalgamated mercury, remaining from the earlier removal action, are stored inside the building. The facility is abandoned and there is no security at the Site. Evidence of repeated episodes of break-ins/vandalism is apparent. Additionally, Utica has recently been experiencing an outbreak of fires which have been attributed to arson. The area in which the PCB contaminated debris is stockpiled had been secure in the past, but repeated incidents of vandalism have compromised this area. The expedited removal

assessment observed abundant evidence of public entry and vandalism, i.e., holes in the fencing, graffiti, doors ripped off their hinges, hundreds of windows broken, etc. Several areas of roofing have collapsed and friable asbestos was observed hanging from pipes as well as in piles on the floor. The large volume of PCB-contaminated debris and asbestos, as well as the continuing deterioration of the building, presents a potential threat to human health and the environment. The plethora of broken windows, along with the large areas of roof collapse, has created migration pathways for the friable asbestos present. Further, in the event of a fire at the Site, the responding firefighters, as well as nearby residents, would be threatened with exposure to hazardous substances released from the resulting plume. Air dispersion modeling data had concluded that significant concentrations of asbestos and to a lesser extent PCBs could be expected to impact adjacent residential areas as well as areas downwind if a major fire were to occur.

5. NPL status

The Site is not listed on the NPL. The Site has not undergone a preliminary assessment (PA) to determine whether the conditions at the Site required its inclusion on the NPL.

6. Maps, pictures and other graphic representations

See Appendix A.

B. Other Actions To Date

1. Previous actions

After receiving a request for a CERCLA removal action from NYSDEC in May 15, 1986, representatives from both agencies met on-site to discuss removal site evaluation (Evaluation) activities, as well as EPA's and NYSDEC's roles. Based on site conditions at the time of this visit, it was determined that the Evaluation would be completed in two phases. Under Phase I, routine background information would be collected and limited random sampling would be performed. If the results of sampling indicated that hazardous substances were present at concentrations that would threaten the public health and/or welfare or the environment, then Phase II of the Evaluation would be initiated. Phase II would provide additional sampling, which would define the extent of on- or off-site contamination and determine available technologies for on- and off-site treatment and disposal.

Phase I Evaluation activities occurred during June and July 1986 and included the sampling of 65 drums and sumps. Sampling was conducted by the Environmental Response Team and the Superfund Technical Assistance and Response Team (START) and laboratory services were provided by the Environmental Emergency Response Unit. Verbal results from the sampling were received on August 1, 1986. Results indicated that PCB contamination was widespread. In

addition, during sampling it was observed that large volumes of oil had been spilled throughout one area of the facility.

Based upon Phase I Evaluation activities, which not only identified PCB contaminated oils, but also a wide range of other hazardous substances, i.e., solvents, acids, asbestos and miscellaneous raw materials at the Site, on August 5 and 6, 1986, Phase II Evaluation activities were conducted by the EPA and START.

In order to provide an accurate cost estimate for the removal, volume estimates of all waste streams were determined. Since one portion of the facility, i.e., press rooms, was grossly contaminated with oil (both on the floor and on the equipment), wipe samples were collected to identify the extent of decontamination that would be necessary. Phase II Evaluation activities were completed on September 15, 1986.

During Phase I Evaluation activities, PCB contaminated oils were discovered in sumps and drums. PCB concentrations encountered ranged from 10,810 ppms in the sumps to 117 ppms in the drums. Subsequent sampling of interior surfaces of PCB residues revealed contamination throughout the production area of the facility. PCB contamination was found on floors, walls and machinery. The highest PCB concentration on surface materials consisting of 1,180 micrograms of PCB per square meter was found on a piece of machinery about to be removed from the Site by a salvage company. More than 9,000 gallons of PCB waste oil was estimated to be on-site in 35 sumps, 22 transformers and twelve drums.

Other hazardous materials identified included nine open vats containing acid and other metal treating solutions, 140 drums and approximately 5,000 linear feet of asbestos insulation. One of the nine vats contained 450 gallons of sulfuric acid with a pH of 0.2. Approximately 15 carboys of nitric acid and hydrochloric acid were present on-site.

The 140 drums were located both inside and outside the building and contained raw materials, waste oils, solvents and "unknowns."

During Evaluation activities, NYSDEC oversaw the removal of equipment which was auctioned by the bankruptcy trustees. Workers dismantled and shipped machinery to their respective owners. After PCB contamination was discovered, NYSDEC required sampling and decontamination of machinery prior to removal. Prior recipients were notified that their machinery may have been contaminated with PCBs.

In June 1986, NYSDEC's Division of Construction Management hired a contractor to improve security at the Site. Although site security was upgraded and the local police department provided frequent patrols of the area, site access continued to be a problem.

NYSDEC reported several cases of vandalism and there were numerous signs of site access such as spilled drums, cut fencing as well as paper and debris scattered throughout the building. In

addition, the Utica Fire Department has responded to four fires since the Site was abandoned.

On October 29, 1986, NYSDEC informed the EPA of an incident involving two teenagers that were exposed to chemicals while on-site. Apparently, several drums of raw materials had been spilled and one carboy of nitric acid had broken. One teenager complained of a rash caused by exposure to the acid. The other teenager complained of having difficulty breathing. Both teenagers were brought to a local hospital, treated and released.

Due to its limited spending authority and the time required to obtain bids as well as select a security service, NYSDEC requested that EPA provide security.

On November 17, 1986, after approval of a Request for Rapid Authorization of CERCLA Removal Action Monies, EPA initiated a removal action that included 24-hour security and the installation of night-time lighting. Upon completion of the evaluation activities previously mentioned, EPA began cleanup activities on May 5, 1987. Previous response activities resulted in the cleaning of the building's interior surfaces and consolidating PCB contaminated debris into two secured rooms inside the building.

Decisions associated with selecting methodologies for decontaminating the building's interior and addressing contaminated debris were consistent with cleanup standards established by EPA's Office of Pesticides and Toxic Substances. These standards required that a very large volume of debris be addressed. The costs for transportation and disposal of the contaminated debris were considerable. Off-site shipments for disposal were discontinued to ensure sufficient funding (within the CERCLA statutory funding limits) to complete decontamination of the building and provide 24-hour security. Approximately 3,500 cubic yards of debris, weighing approximately 5,000 tons, were amassed into two secured rooms upon completing the consolidation of debris throughout the Site.

Previous removal activities at the Site included the following: removing hazardous materials; consolidating and securing PCB contaminated debris within a prepared and secured "vault" area; collecting samples and performing laboratory analyses to determine the extent of PCB contamination; confirming decontamination results as well as characterizing hazardous wastes; and decontaminating the building's interior surfaces. Decontamination procedures utilized high pressure water lasers which used water recycled through an on-site treatment system. The removal of PCB-contaminated flooring and the consolidation of metals, containers, as well as assorted debris strewn about the Site, resulted in the accumulation of 3,500 cubic yards of PCB-contaminated materials. The removal of approximately 100 cubic yards (400-500 tons) of dense metal from 47 sumps was a lengthy and arduous process which required the use of level "B" protective clothing and working in confined space conditions. The total cost for EPA's previous removal activities was $1,991,259, of which $1,775,609 was for mitigation contracting.

Other removal response activities conducted at the Site included the following:

- Elimination of physical hazards at the facility by covering the sumps with plywood, visqueen and liquid nail;
- On-site treatment of 140 drums (8,250 gallons) containing diverse materials, including corrosive liquids and solids, solvents, and raw materials;
- Remediation of elemental mercury in isolated areas of the building;
- Recycling several hundred gallons of laboratory chemicals, including assorted reagent grade acids, by donating such chemicals to a local metal plating facility;
- Draining, rinsing, transportation, and disposal of seven PCB transformers. Disposal of the resulting 3,190 gallons of PCB contaminated oil and rinsate thru off-site incineration;
- Draining 19 non-PCB transformers and recycling 4,675 gallons of "clean" oil;
- Transportation and disposal of 116 tons of PCB-contaminated debris at a Toxic Substances Control Act permitted landfill facility; and
- Transportation and disposal/recycling of 1,000 cubic yards of non-hazardous paper and wood in order to eliminate fire hazards at the Site.

These removal response activities were completed on September 25, 1987. Further remediation of the Site was to be conducted by NYSDEC. NYSDEC has repaired the fence on several occasions because the perimeter fencing was in a deteriorated condition and there had been repeated episodes of break-ins as well as acts of vandalism. NYSDEC entered into an Administrative Order on Consent with Utica for additional remediation activities to be conducted at the Site. However, due to Utica's poor financial situation, work beyond the draft Phase I Site Investigation report and the analysis of remedial alternatives was not performed.

2. Current actions

NYSDEC continues to inspect the Site periodically for break-ins and to perform fence repairs as needed.

C. State and Local Authorities' Roles

1. State and local actions to date

The City of Utica involuntarily acquired ownership of the Site and obtained a grant under NYSDEC's 1986 Environmental Quality Bond Act to remediate the Site. As part of the grant

process, Utica was required to enter into a consent agreement (# A6-199-89-4) with NYSDEC. Remediation of the Site by Utica was to have been conducted in three phases. Phase I involved the remediation of non-structural components including 28 metal-stamping presses, oil, and grease lines; PCB-contaminated debris; asbestos-containing material (ACM); three drums containing mercury; and crates situated outside the building. Phase II required sampling of the walls and other structural surfaces to determine the extent of residual contamination. Phase III consisted of the structural decontamination and/or disposal of the building. Due to Utica's poor financial situation, work beyond the draft Phase I Site Investigation report and the analysis of remedial alternatives was not performed.

On March 17, 1997, NYSDEC again referred the Site to the EPA for removal action. The Site is currently listed as an NYSDEC Class 2 Inactive Hazardous Waste Site in NYSDEC Region 6.

2. Potential for continued State/local response

NYSDEC continues to monitor the integrity of the perimeter fencing and the Site for evidence of break-ins. Other than these actions and continuing to provide support for the EPA removal action, no additional response actions are planned by State or local authorities.

III. THREATS TO PUBLIC HEALTH, OR WELFARE, OR THE ENVIRONMENT AND STATUTORY AND REGULATORY AUTHORITIES

The conditions at the Site meet the criteria for a CERCLA removal action as described in 40 CFR 300.415(b)(2) of the National Contingency Plan (NCP). Factors that support conducting a removal action at the Site are described below.

A. Threats to Public Health or Welfare

(i) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, or pollutants, or contaminants;

Hazardous substances present on the Site pose a threat to public health and the environment. Repeated break-ins through the perimeter fence, resulting in unauthorized entries onto the Site, creates the potential for public exposure to PCB contaminated structural and non-structural materials by direct contact. Further, the partial collapse of the building exposes ACM to the elements and increases the potential for the off-site migration of asbestos. In the event of a fire, the resulting plume could potentially affect the surrounding populations. The Washington and Kearnan schools are less than 5 blocks away from the Site.

(iii) Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release;

Approximately 3,500 cubic yards of PCB contaminated debris (≤62,000 ppm); 28 large metal stamping presses, the surfaces of which are grossly contaminated with PCBs (≤1,800 $\mu g/100$ cm^2); two drums of mercury laden waste; and more than 5,000 linear feet of friable asbestos pipe wrap are present on-site. Evidence of numerous break-ins and vandalism has been documented at the Site. Utica is currently experiencing an outbreak of arson-related fires. In the event that a fire occurs in the building, the surrounding population would be exposed to the hazardous substances contained in a resulting plume.

(v) Weather conditions that may cause hazardous substances, or pollutants, or contaminants to migrate or be released;

Heavy snowfall will exacerbate the present deteriorating condition of the building. Further collapse of the building would expose more ACM and possibly jeopardize the secure area in which the PCB-contaminated debris is stockpiled. High winds that frequent the area would contribute to possible off-site migration of asbestos fibers.

(vi) Threat of fire or explosion; and

Since the beginning of the year, Utica has had more than 30 incidents of arson related fires. Most of these fires have consumed uninhabited dwellings; some unoccupied commercial establishments have also been burned. Because the Site is situated in the downtown area and the perimeter fence is frequently compromised, the potential of the Site as a future target for an arsonist(s) is a real possibility. The local fire department has stated that it would be unwilling to enter the building on-site in the event of a fire; the strategy for fighting a fire at the facility would be to contain the blaze and prevent its spread to surrounding properties. The uncontrolled combustion of the hazardous substances present at the Site poses a threat to public health and welfare.

An air dispersion model, EPA's SCREEN3, was performed to estimate worst-case concentrations of asbestos and PCBs that could potentially result from a fire at the Site. For this analysis the emissions from the building fire is assumed to disperse in a manner similar to the emissions that occur from an area source (i.e. the entire building). Area source emissions are assumed to occur at constant rate over the entire surface area being modeled. The recommended model for estimating worst-case concentrations from an area source is EPA's SCREEN3 model. This model predicts the maximum 1-hour average concentrations at downwind receptors for 52 pre-programmed worst-case meteorological conditions.

The weights of PCBs and asbestos present on-site were calculated from known concentrations taken from previous sampling events and from estimated volumes of the debris pile located inside the vault as well as pipe insulation/piles throughout the building. The amount of material available for emission was assumed to be 24% of the PCBs and 10% of the asbestos. Therefore, the

calculated weights available for emission were determined to be 17 pounds for PCBs and 17,365 pounds for asbestos.

The maximum 1-hour impact for the PCB scenario, occurring 185 meters downwind of the facility with a wind speed of 1.0 m/s, was predicted to be 1,479 $\mu g/m^3$ (1.5 mg/m^3). The maximum 1-hour impact for the asbestos scenario, occurring 276 meters downwind of the facility with a wind speed of 1.0 m/s, was predicted to be 32,644 $\mu g/m^3$. This impact is equivalent to a concentration of 4,211 asbestos fibers/cm^3. The established Occupational Safety and Health Act Permissable Exposure Limit, based on an 8-hour Time Weighted Average for PCBs is 500 $\mu g/m^3$ and for asbestos is 0.1 fiber/cm^3 (refer to Appendix B for the Modeling Results).

(vii) The availability of other appropriate federal or state response mechanisms to respond to the release.

NYSDEC requested that EPA undertake a removal action at the Site to abate the threats to public health and safety, as well as to the environment posed by PCBs, asbestos and other hazardous substances. Asbestos is not a hazardous waste in New York State and thus cannot be addressed with State funds.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from the Site, if not addressed by implementing the response action as presented in this memorandum, present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. EXEMPTION FROM STATUTORY LIMITS

A. Emergency Exemption

1. There is an immediate risk to public health, or welfare, or the environment;

The Site was secured, in previous removal activities, by stockpiling PCB debris within a prepared "vault," repairing an existing chain link fence and posting hazardous waste warning signs. Surrounding the Site are commercial/industrial establishments, residences and three schools. The building's location in the downtown area attracts trespassers as is evidenced by repeated break-ins and vandalism. Numerous arson related fires have recently occurred in Utica. Due to these factors, the Site could be a prime target for arsonist related activities. In the event of a fire, nearby residents, as well as residents downwind, would be severely impacted by the resulting plume. The presence of friable asbestos escalates the concern for the public health, welfare, and the environment. The local fire department has stated that it would be unwilling to enter the building in the event of a fire and that its strategy for fighting a fire at the facility would be to contain the blaze and prevent its spread to surrounding properties. The uncontrolled combustion of the various materials containing hazardous substances, present on the Site, would pose a

significant threat to public health.

2. Continued response actions are immediately required to prevent, limit, or mitigate an emergency; and

Greater than 3,500 cubic yards of PCB contaminated debris as well as mercury and ACM are present at the Site. PCBs are present at concentrations as high as 62,000 ppm. The Site is abandoned and has a history of break-ins and vandalism, even when security was in place. There is abundant evidence of public entry and vandalism, i.e., holes in the fencing, graffiti, doors ripped off their hinges, hundreds of windows broken, etc. Several areas of roofing have collapsed and friable asbestos was observed hanging from pipes as well as in piles on the floor. The formerly secured area in which the PCB-contaminated debris was stockpiled is now accessible to trespassers. Thus, exposure, via direct contact, has been dramatically increased. In the event of a fire, both the responding firefighters and the nearby residents would be threatened with exposure to hazardous substances. The abundances of broken windows, along with the several large areas of roof collapse, have created migration pathways for the friable asbestos present. The large volume of PCB contaminated debris and asbestos, as well as the continuing deterioration of the building, presents an immediate threat to human health and the environment. Continued removal actions are required to prevent an emergency from occurring.

3. Assistance will not otherwise be provided on a timely basis.

No other governmental entity or any Potentially Responsible Party (PRP) has agreed to remove and dispose of the hazardous materials at the Site, in a timely basis, in order to mitigate the threats posed. The Site is not listed on the NPL; further action by EPA through a CERCLA remedial action will not occur.

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

A. <u>Proposed Actions</u>

1. Proposed action description

The removal action proposed in this memorandum is intended to eliminate the threats posed by the hazardous substances contained within the building. This will be accomplished by the following response actions:

- Removal and proper disposal of PCB contaminated debris according to applicable regulatory requirements;
- Removal and proper disposal of asbestos containing materials according to applicable regulatory requirements;

- Selective demolition/shoring of the building to provide a safer working environment during remediation and to provide access to the metal stamping presses;

- External cleaning and disassembling of the metal stamping presses and then salvaging such presses to a dealer for scrap value;

- Segregation of contaminated debris into recyclable metal and nonmetal categories; decontamination of metal debris; salvaging the metal to a dealer for scrap value; and disposal of the nonmetal debris at a Treatment Storage and Disposal Facility (TSDF) permitted to accept PCB-contaminated debris;

- Disposal of the lubrication system pipelines including the PCB contaminated lubricants associated therewith;

- Disposal of mercury-contaminated waste at a TSDF permitted to accept such a waste; and

- Repairing and maintaining the perimeter fence and providing Site security.

2. Contribution to remedial performance

The removal action at the Site is consistent with the requirement of Section 104(a)(2) of CERCLA, which states, "any removal action undertaken...should...to the extent practicable, contribute to the efficient performance of any long-term remedial action with respect to the release or the threatened release concerned." Since any remedial action undertaken would encompass the elements in this response, this removal action would be consistent with future remedial work.

3. Description of alternative technologies

Because of the quantities and types of hazardous substances and/or wastes at the Site, on-site treatment and/or incineration is not appropriate. The selected removal action including the characterization, transportation, and disposal of all hazardous substances and/or wastes and decontamination of grossly contaminated structural, as well as non-structural components, have been determined to be the appropriate method at the Site based upon the criteria of effectiveness, implementability and cost.

4. EE/CA

Due to the time-critical nature of this removal action, an EE/CA will not be prepared.

5. Applicable or relevant and appropriate requirements (ARARs)

ARARs that are within the scope of this removal action, which pertain to the cleanup and disposal of hazardous waste, will be identified and addressed to the extent possible. The federal ARARs preliminarily identified for this removal action are Resource Conservation and Recovery Act,

VII. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

As discussed above, Utica has had more than 30 suspected arson related fires during this year. Due to the Site's location in the downtown area and its history of break-ins and vandalism, the Site could be a prime target for arsonist related activities. If no action is taken or the proposed removal action is delayed, the risk to public health and welfare will be increased by the potential targeting of the Site by an arsonist, which would release hazardous substances including asbestos and PCBs into the environment. Additionally, continued collapse of the building may exacerbate the off-site migration of friable asbestos.

VIII. OUTSTANDING POLICY ISSUES

No outstanding policy issues are known to be associated with the Site.

IX. ENFORCEMENT

The ongoing enforcement actions at the Site are discussed in the confidential enforcement addendum attached to this Action Memorandum.

X. RECOMMENDATION

This decision document represents the selected removal response action for the Bossert Manufacturing Site, City of Utica, Oneida County, New York, which is developed in accordance with CERCLA, as amended, and is consistent with the NCP. This decision is based on the administrative record for the Site.

Conditions at the Site meet the NCP Section 300.415(b)(2) criteria for a removal action and the CERCLA Section 104(c) emergency exemption from the 12-month and $2 million limitations, and I recommend your approval of the proposed removal action and a $2 million exemption. The proposed action will require an additional funding of $3,998,741, of which $3,574,391 is from the Regional removal allowance. The requested funds will result in a total project ceiling of $5,990,000 and a mitigation contracting ceiling of $5,350,000.

Please indicate your approval as per current delegation authority, by signing below.

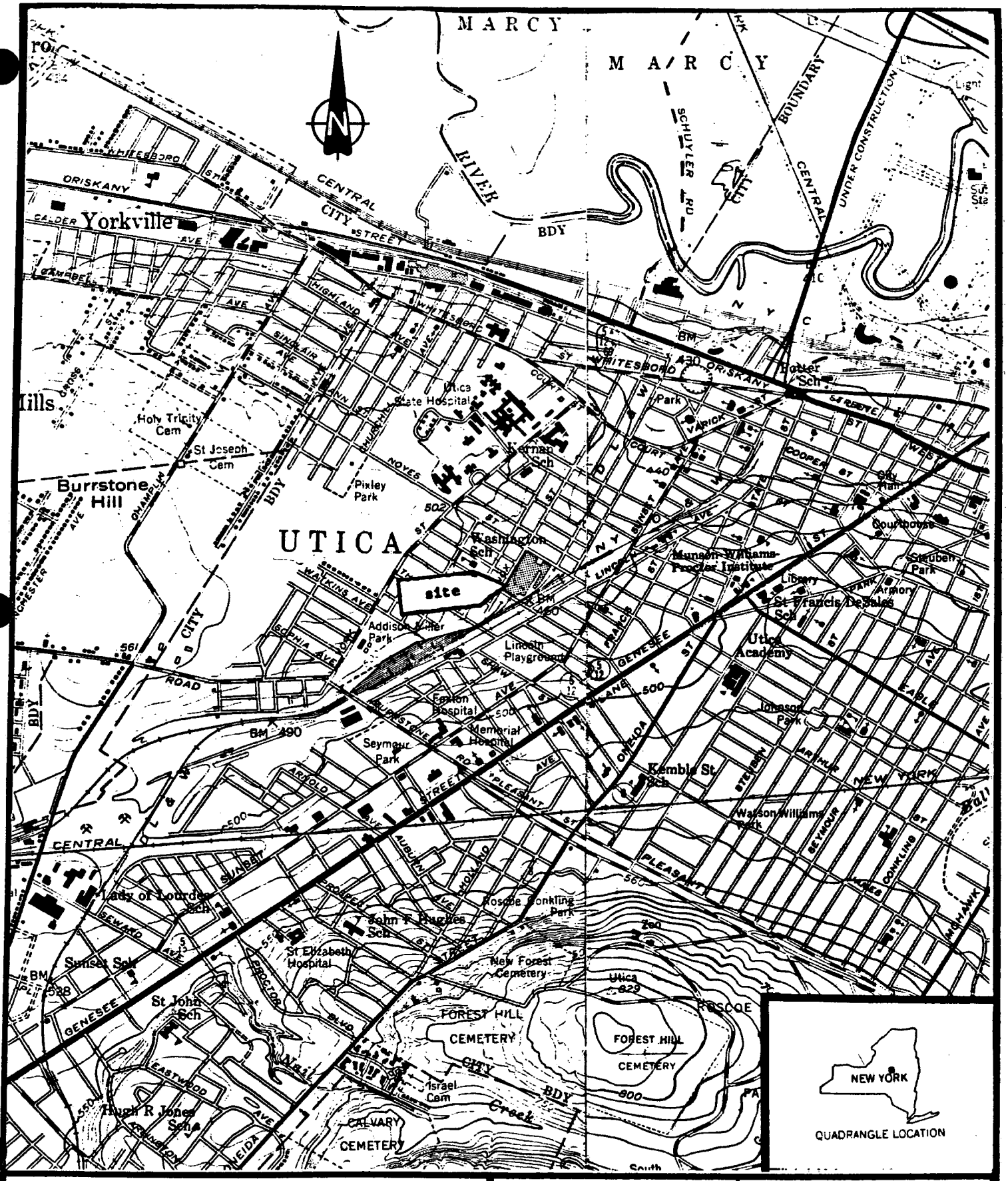
APPROVAL: _____ **Date:** 5/26/5?
Jeanne M. Fox
Regional Administrator

DISAPPROVAL: _____ **Date:** _____
Jeanne M. Fox
Regional Administrator

cc: (after approval)

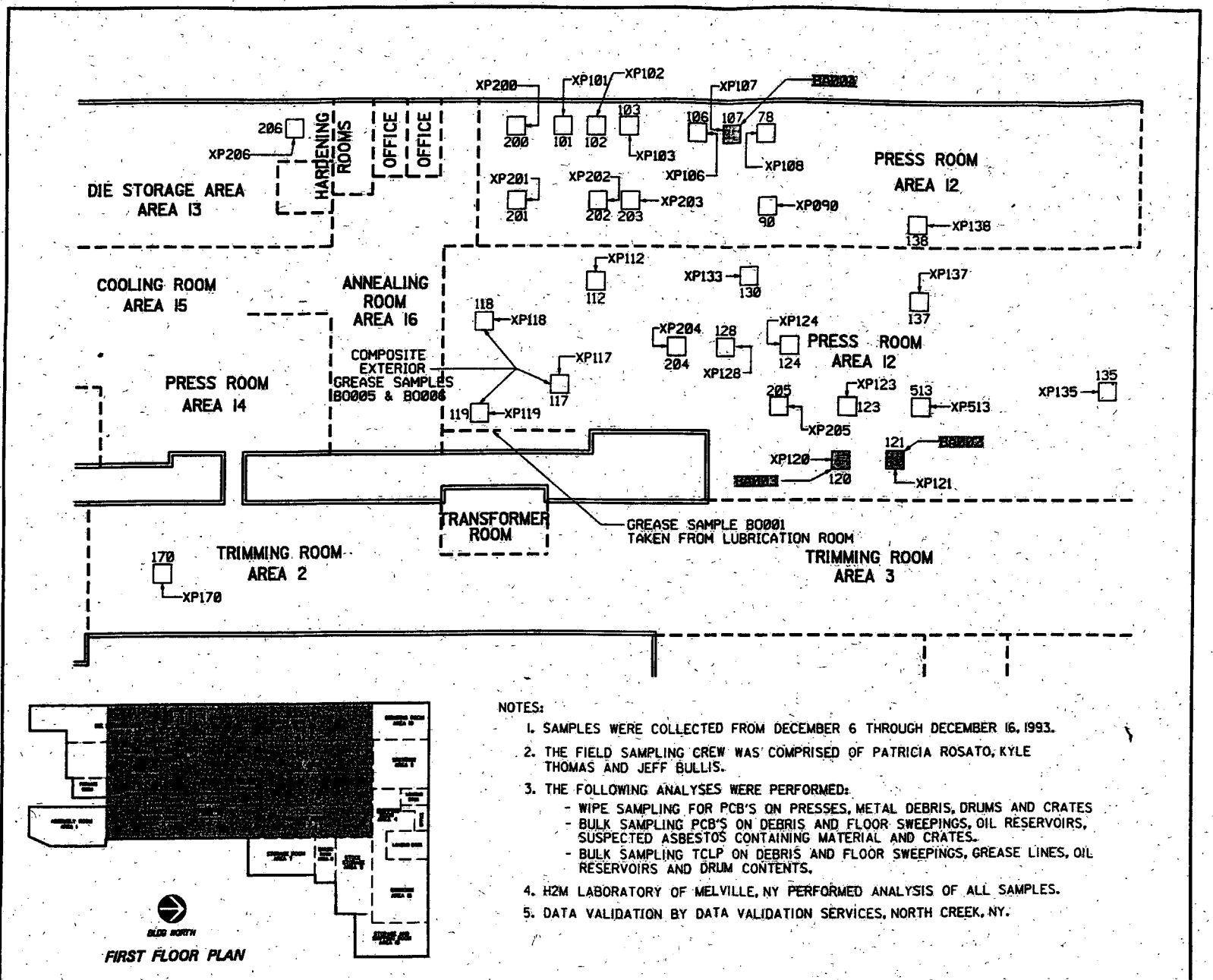
J. Fox, RA
W. Muszynski, DRA
R. Caspe, ERRD-D
W. McCabe, ERRD-DD
R. Salkie, ERRD-RAB
J. Rotola, ERRD-RAB
E. Dominach, ERRD-RAB
G. Zachos, OMBUDSMAN
B. Bellow, CD
P. Simon, ORC-NYCSUP
J. Yu, ORC-NYCSUP
R. Gherardi, OPM-FIN
S. Murphy, OPM-FIN
B. Shaw, 5202G
M. O'Toole, NYSDEC
T. Vickerson, NYSDEC
A. Raddant, OEPC
G. Wheaton, NOAA
O. Douglas, START

APPENDIX A



WESTON DESIGNERS CONSULTANTS	SPILL PREVENTION & EMERGENCY RESPONSE DIVISION	EPA PM ROTOLA	FIGURE 1
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.		TAT PM MARESCA	SITE MAP BOSSERT MFG.

FIGURE 2



LEGEND

- B0000 BULK OIL SAMPLE POINT
- XP000 MACHINE WIPE SAMPLE PO
- B0000 BULK GREASE SAMPLE PO
- 100 MACHINE W/I.D. NUMBER

NOTES:

1. SAMPLES WERE COLLECTED FROM DECEMBER 6 THROUGH DECEMBER 16, 1993.
2. THE FIELD SAMPLING CREW WAS COMPRISED OF PATRICIA ROSATO, KYLE THOMAS AND JEFF BULLIS.
3. THE FOLLOWING ANALYSES WERE PERFORMED:
   - WIPE SAMPLING FOR PCB'S ON PRESSES, METAL DEBRIS, DRUMS AND CRATES
   - BULK SAMPLING PCB'S ON DEBRIS AND FLOOR SWEEPINGS, OIL RESERVOIRS, SUSPECTED ASBESTOS CONTAINING MATERIAL AND CRATES.
   - BULK SAMPLING TCLP ON DEBRIS AND FLOOR SWEEPINGS, GREASE LINES, OIL RESERVOIRS AND DRUM CONTENTS.
4. H2M LABORATORY OF MELVILLE, NY PERFORMED ANALYSIS OF ALL SAMPLES.
5. DATA VALIDATION BY DATA VALIDATION SERVICES, NORTH CREEK, NY.

BOSSERT SITE
(SITE CODE: 6-33-029)

MACHINE SAMPLING POINTS

NOT TO SCALE

0450.046.01F

Stetson-Harza
A HARZA COMPANY
151 Genesee Street, Utica, NY 13501 (315) 797-5800
Rensselaer Technology Park
250 Jordan Rd., Troy, NY 12180 (518) 283-8080

APPENDIX B

Roy F. Weston, Inc.
GSA Raritan Depot
Building 209 Annex (Bay F)
2890 Woodbridge Avenue
Edison, New Jersey 08837-3679
908-321-4200 • Fax 908-494-4021

DATE: 28 August 1997

TO: Rod Turpin, ERTC Work Assignment Manager

THROUGH: Steven Schuetz, REAC Air Group Team Leader

FROM: Keith Ocheski, REAC Modeling Team Member

SUBJECT: Bossert Site Dispersion Modeling Results

As requested, a dispersion modeling analysis was performed to estimate worst-case ambient concentrations of asbestos and PCBs that could result from a fire at the former Bossert Manufacturing Facility. The site consists of a vacant 186,878 ft^2 former production facility situated on a parcel of land of roughly six acres. The facility contains a stockpile of various PCB contaminated materials that resulted from an initial emergency cleanup by the U.S. EPA in 1987. In addition to the PCB contamination there is a significant amount of asbestos contained in the insulation surrounding portions of the buildings piping. This modeling analysis provides an estimate of the potential worst-case off-site air concentrations of PCB and asbestos that may occur if the facility caught fire.

In order to perform the dispersion modeling, information regarding the following needed to be determined and/or calculated:

1. The amount (mass) of PCB and asbestos contained within the facility that could potentially be released in a fire.
2. Dimensions of the building and areas that contain PCB contaminated debris.
3. The location of the nearest residence/business.

The majority of the information needed was obtained from the O'Brien &Gere Engineers *Phase I Draft Site Investigation Report (July, 1994)* for the Bossert Site. Additional information was gathered, via a site visit, on 30 July 1997 by Howard Schmidt (REAC), Rod Turpin (ERTC) and Jack Harmon (OSC).

PCB Emissions Calculation

In the O'Brien and Gere draft site investigation report it was estimated that the facility contains approximately 3000 cubic yards (81,000 ft^3) of PCB contaminated material. This material consists of metal debris, wooden debris, concrete, cardboard, floor sweepings and empty drums. In the event of a fire it was assumed that only the wood debris, cardboard and floor sweepings would have the potential to burn and release PCB's to the atmosphere. Based on the 30 July 1997 site visit in conjunction with an estimate by O'Brien and Gere it was assumed that 25% of the total volume of debris was either wood (10%), cardboard (10%) and floor sweepings (5%). The mass of each type of debris contained in the facility was calculated by multiplying the volume of the material by its corresponding density. The following table lists the volume, density and mass of each type of debris that was used in the modeling analysis:

Debris Type	Volume (ft^3)	Density (lbs/ft^3)	Mass (lbs)	Notes
Wood	8,100	42.0	340,200	Density based on EPA AP-42 listed density for red oak wood.
Cardboard	8,100	5.0	40,500	Density is estimated (no published density information available).
Floor Sweepings	4,050	62.4	252,720	Density based on EPA default value for dry soil.

The next step was to calculate the mass of PCBs contained in each type of material. As part of the Phase I site investigation O'Brien and Gere performed field sampling of these debris types in order to characterize the extent of PCB contamination. For each debris type the average sampled PCB concentration was used in order to calculate the mass of PCBs contained within each debris type. The final step was to estimate the percentage of PCBs that would be emitted from each debris type in the case of a fire. For wooden and cardboard waste it was assumed that 100% of the PCBs would be emitted since it would be likely that these types of debris would burn completely. For the floor sweepings it was assumed that 10% of the PCB's would be emitted since only PCBs contained in the exposed surface portion of the floor sweepings would have the potential to be volatilized in a fire situation. Based on these assumptions it was calculated that 16.6 lbs of PCBs could potentially be emitted from a fire. The following table summarizes these PCB emission calculations:

Debris Type	Average Monitored PCB Concentration (ppm)	Mass of PCB's in Material (lbs)	% of PCBs Available for Emission	Mass of PCBs Available for Emission (lbs)
Wood	30.9	10.5	100%	10.5
Cardboard	8.0	0.3	100%	0.3
Floor Sweepings	227.0	57.4	10%	5.8
		Total Mass of PCBs Available for Emission		16.6

Asbestos Emissions Calculation

Chrysotile asbestos is contained in the pipe insulation that surrounds the majority of the facilities pipework. It was estimated that the facility contains approximately 2500 feet of asbestos insulated piping that has an average diameter of four inches with a surrounding one inch thick insulation wrap. The insulation was assumed to be 40% Chrysotile asbestos by volume. Based on these assumptions it was calculated that the facility contains 109.1 ft^3 of Chrysotile asbestos, this volume of asbestos corresponds to a mass of 17,365.3 lbs when multiplied by the density of Chrysotile asbestos (2.55 g/cc).

In a building fire the asbestos fibers could potentially be emitted to the atmosphere via thermal updrafts carrying damaged portions of the insulation out of the building. For this modeling analysis it was assumed that the entire roof would collapse/burn and that 10% of the total asbestos mass (1736.5 lbs) would be released to the atmosphere. Table 1 summarizes the assumptions used in these calculations.

Modeling Inputs/Assumptions

For this analysis the emissions from the building fire are assumed to disperse similar to the emissions that occur from an area source. Area source emissions are assumed to occur at constant rate over the entire surface of the area being modeled. The recommended model for estimating worst-case concentrations from an area source is EPA's SCREEN3 model. This model predicts the maximum 1-hour average concentrations at downwind receptors for 52 pre-programmed worst-case meteorological conditions.

For the PCB modeling the emissions were assumed to occur from an area source equal to the width and length of the PCB contaminated debris storage area. The asbestos emissions were assumed to occur from a square area source with the equivalent area to the Bossert production facility building (186,878 ft^2). Both scenarios used the roof height of 17 feet as the area source height. For both the PCB and asbestos modeling the emissions were assumed to occur over a six hour period.

Since the building is located next to the property fenceline, impacts were predicted for receptors from 25 meters to 5000 meters downwind. The area surrounding the facility is relatively flat, therefore, the receptors were assumed to be at the same elevation as the site (i.e., flat terrain). The following table summarizes the source input parameters used in the modeling analysis:

SCREEN3 MODELING INPUTS

Parameter	Units	Modeling Scenario	
		PCB's	Asbestos
Length	meters	91.4	131.8
Width	meters	9.1	131.8
Height	meters	5.18	5.18
Emission Rate	g/m²/sec	0.00042	0.0021

Modeling Results

The maximum 1-hour impact for the PCB scenario was predicted to be 1479 ug/m³ (1.5 mg/m³)and occurs 185 meters downwind of the facility under F stability with a wind speed of 1.0 m/s. Figure 1 displays the contours of maximum 1-hour PCB impacts within five kilometers of the facility.

The maximum 1-hour impact for the asbestos scenario was predicted to be 32,644 ug/m³ and occurs 276 meters downwind of the facility under F stability with a wind speed of 1.0 m/s. This impact is equivalent to a concentration of 4,211 asbestos fibers/cc (based on 129,000 fibers/ug). Figure 2 displays the contours of maximum 1-hour asbestos concentration (fibers/cc) within five kilometers of the facility.

The output files from the SCREEN3 modeling runs for PCB and asbestos are included as Attachments A and B, respectively.

TABLE 1
BOSSERT SITE MODELING ANALYSIS

Asbestos Emissions Calculations

Diameter (in)	Diameter (ft)	Area (ft^2)	Length (ft)	Volume(ft^3)
4 (Pipe)	0.33	0.087	2500	218.2
6 (Insulation)	0.50	0.196	2500	490.9

Volume of Asbestos Pipe Insulation:	272.7	ft^3
% Asbestos in Insulation:	40	%
Volume of Asbestos:	109.1	ft^3
	3,088,906	cc
Density of Asbestos:	2.550	g/cc (based on specific gravity)
Mass of Asbestos:	7,876,709.1	g
	17,365.3	lbs
% of Asbestos Available for Emission:	10.0	%
Mass of Asbestos Available for Emission:	787,670.9	g
	1,736.5	lbs

FIGURE 1

BOSSERT SITE - SCREEN3 MODELING RESULTS

Maximum 1-Hour PCB Concentrations (ug/m3)

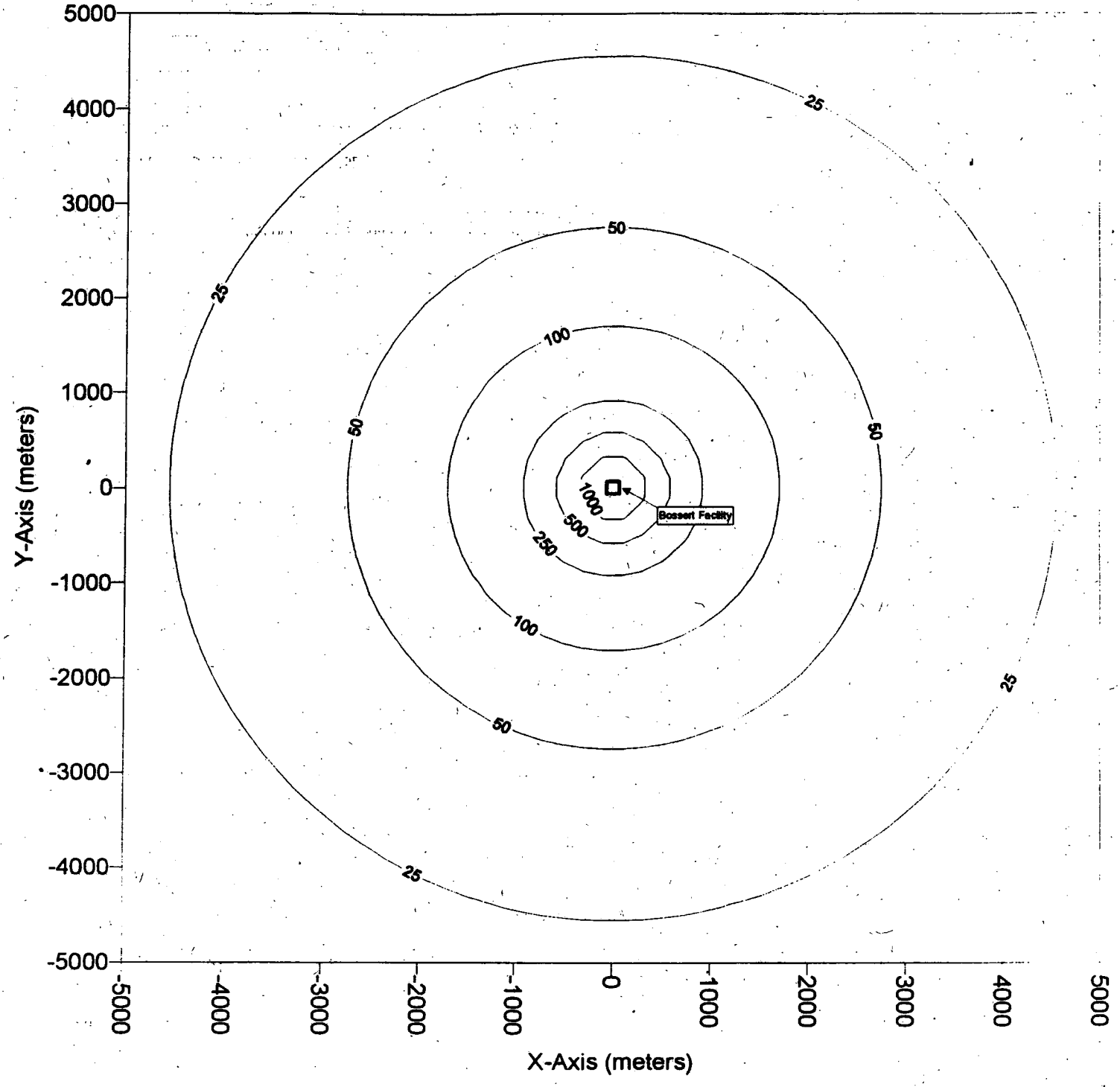
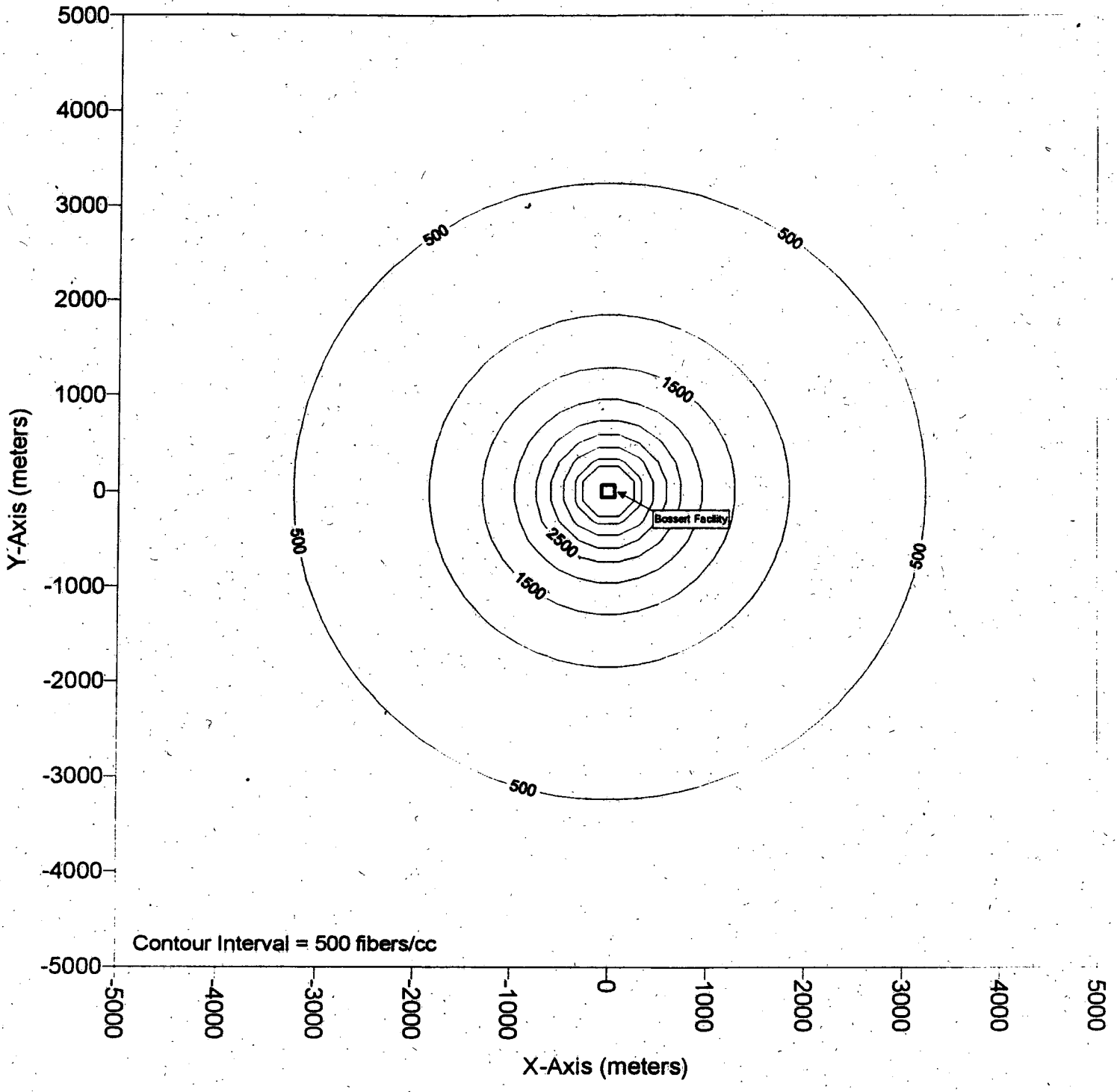


FIGURE 2

BOSSERT SITE - SCREEN3 MODELING RESULTS

Maximum 1-Hour Asbestos Concentrations (fibers/cc)



Attachment A

08/25/97
13:43:15

*** SCREEN3 MODEL RUN ***
*** VERSION DATED 96043 ***

Bossert - PCB 10% - Rooftop Release - 6-Hour Duration

SIMPLE TERRAIN INPUTS:

SOURCE TYPE	=	AREA
EMISSION RATE (G/(S-M**2))	=	.416000E-03
SOURCE HEIGHT (M)	=	5.1800
LENGTH OF LARGER SIDE (M)	=	91.4000
LENGTH OF SMALLER SIDE (M)	=	9.2000
RECEPTOR HEIGHT (M)	=	.0000
URBAN/RURAL OPTION	=	RURAL

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

MODEL ESTIMATES DIRECTION TO MAX CONCENTRATION

BUOY. FLUX = .000 M**4/S**3; MOM. FLUX = .000 M**4/S**2.

*** FULL METEOROLOGY ***

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*** SCREEN AUTOMATED DISTANCES ***
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*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
25.	744.6	3	1.0	1.0	320.0	5.18	0.
100.	1403.	5	1.0	1.0	10000.0	5.18	0.
200.	1464.	6	1.0	1.0	10000.0	5.18	0.
300.	1125.	6	1.0	1.0	10000.0	5.18	0.
400.	813.7	6	1.0	1.0	10000.0	5.18	0.
500.	605.4	6	1.0	1.0	10000.0	5.18	0.
600.	466.8	6	1.0	1.0	10000.0	5.18	0.
700.	371.5	6	1.0	1.0	10000.0	5.18	0.
800.	305.3	6	1.0	1.0	10000.0	5.18	0.
900.	256.5	6	1.0	1.0	10000.0	5.18	0.
1000.	219.3	6	1.0	1.0	10000.0	5.18	0.
1100.	190.7	6	1.0	1.0	10000.0	5.18	0.
1200.	167.8	6	1.0	1.0	10000.0	5.18	0.
1300.	149.2	6	1.0	1.0	10000.0	5.18	0.
1400.	133.7	6	1.0	1.0	10000.0	5.18	0.
1500.	120.6	6	1.0	1.0	10000.0	5.18	0.
1600.	109.6	6	1.0	1.0	10000.0	5.18	0.
1700.	100.1	6	1.0	1.0	10000.0	5.18	0.
1800.	91.85	6	1.0	1.0	10000.0	5.18	0.
1900.	84.69	6	1.0	1.0	10000.0	5.18	0.
2000.	78.44	6	1.0	1.0	10000.0	5.18	0.
2100.	73.15	6	1.0	1.0	10000.0	5.18	0.
2200.	68.46	6	1.0	1.0	10000.0	5.18	0.
2300.	64.26	6	1.0	1.0	10000.0	5.18	0.
2400.	60.48	6	1.0	1.0	10000.0	5.18	0.
2500.	57.06	6	1.0	1.0	10000.0	5.18	0.
2600.	53.96	6	1.0	1.0	10000.0	5.18	0.
2700.	51.13	6	1.0	1.0	10000.0	5.18	0.
2800.	48.54	6	1.0	1.0	10000.0	5.18	0.
2900.	46.17	6	1.0	1.0	10000.0	5.18	0.
3000.	44.00	6	1.0	1.0	10000.0	5.18	0.

3500.	35.71	6	1.0	1.0	10000.0	5.18	0.
4000.	29.81	6	1.0	1.0	10000.0	5.18	0.
4500.	25.42	6	1.0	1.0	10000.0	5.18	0.
5000.	22.04	6	1.0	1.0	10000.0	5.18	0.

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 25. M:

185.	1478.	6	1.0	1.0	10000.0	5.18	0.

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*** SUMMARY OF SCREEN MODEL RESULTS ***
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CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	1478.	185.	0.

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** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
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Attachment B

08/25/97
13:40:08

*** SCREEN3 MODEL RUN ***
*** VERSION DATED 96043 ***

Bossert - Asbestos 10% - Rooftop Release - 6 Hour Duration

SIMPLE TERRAIN INPUTS:

SOURCE TYPE	=	AREA
EMISSION RATE (G/(S-M**2))	=	.210000E-02
SOURCE HEIGHT (M)	=	5.1800
LENGTH OF LARGER SIDE (M)	=	131.8000
LENGTH OF SMALLER SIDE (M)	=	131.8000
RECEPTOR HEIGHT (M)	=	.0000
URBAN/RURAL OPTION	=	RURAL

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

MODEL ESTIMATES DIRECTION TO MAX CONCENTRATION

BUOY. FLUX = .000 M**4/S**3; MOM. FLUX = .000 M**4/S**2.

*** FULL METEOROLOGY ***

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*** SCREEN AUTOMATED DISTANCES ***
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*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
25.	.1400E+05	3	1.0	1.0	320.0	5.18	45.
100.	.2408E+05	4	1.0	1.0	320.0	5.18	45.
200.	.3127E+05	5	1.0	1.0	10000.0	5.18	45.
300.	.3245E+05	6	1.0	1.0	10000.0	5.18	45.
400.	.2962E+05	6	1.0	1.0	10000.0	5.18	45.
500.	.2611E+05	6	1.0	1.0	10000.0	5.18	45.
600.	.2295E+05	6	1.0	1.0	10000.0	5.18	45.
700.	.2030E+05	6	1.0	1.0	10000.0	5.18	45.
800.	.1818E+05	6	1.0	1.0	10000.0	5.18	45.
900.	.1640E+05	6	1.0	1.0	10000.0	5.18	45.
1000.	.1488E+05	6	1.0	1.0	10000.0	5.18	45.
1100.	.1360E+05	6	1.0	1.0	10000.0	5.18	45.
1200.	.1248E+05	6	1.0	1.0	10000.0	5.18	45.
1300.	.1150E+05	6	1.0	1.0	10000.0	5.18	44.
1400.	.1062E+05	6	1.0	1.0	10000.0	5.18	45.
1500.	9842.	6	1.0	1.0	10000.0	5.18	44.
1600.	9146.	6	1.0	1.0	10000.0	5.18	45.
1700.	8521.	6	1.0	1.0	10000.0	5.18	45.
1800.	7961.	6	1.0	1.0	10000.0	5.18	45.
1900.	7452.	6	1.0	1.0	10000.0	5.18	45.
2000.	6998.	6	1.0	1.0	10000.0	5.18	45.
2100.	6602.	6	1.0	1.0	10000.0	5.18	44.
2200.	6245.	6	1.0	1.0	10000.0	5.18	44.
2300.	5919.	6	1.0	1.0	10000.0	5.18	45.
2400.	5618.	6	1.0	1.0	10000.0	5.18	43.
2500.	5341.	6	1.0	1.0	10000.0	5.18	42.
2600.	5086.	6	1.0	1.0	10000.0	5.18	43.
2700.	4850.	6	1.0	1.0	10000.0	5.18	44.
2800.	4631.	6	1.0	1.0	10000.0	5.18	45.
2900.	4428.	6	1.0	1.0	10000.0	5.18	45.
3000.	4241.	6	1.0	1.0	10000.0	5.18	43.

3500.	3507.	6	1.0	1.0	10000.0	5.18	38.
4000.	2965.	6	1.0	1.0	10000.0	5.18	45.
4500.	2552.	6	1.0	1.0	10000.0	5.18	37.
5000.	2227.	6	1.0	1.0	10000.0	5.18	45.

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 25. M:

276.	.3264E+05	6	1.0	1.0	10000.0	5.18	45.

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*** SUMMARY OF SCREEN MODEL RESULTS ***
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CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	.3264E+05	276.	0.

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** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
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